

**Adaptive Battlespace Frameworks: The Key to Planning and Control in
Future Wars**

**A Monograph
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Abstract

"Adaptive Battlespace Frameworks: The Key to Planning and Control in Future Wars", by Major George L. Fredrick, United States Army, 40 pages.

This monograph addresses the question, "Does one battlefield framework fit all environments?" The 1993 version of FM 100-5, OPERATIONS, prescribes the deep, close, and rear (DCR) battlefield framework. Evidence presented in this monograph suggests that this battlefield framework, DCR, is not suitable for commander and staff utilization in planning, visualizing and executing command and control during certain operations.

It is of the utmost importance that commanders and staffs employ suitable battlefield frameworks during planning of military operations in order to develop potential solutions to problems. US Army leaders must possess the skills, tools and doctrinal flexibility to determine future battlefield frameworks.

This monograph looks at the current military operating environment in order to understand the missions to which the Army will deploy. It conducts a review of the history and doctrine of battlefield frameworks. Alternative battlefield frameworks are considered followed by an analysis of each. Finally, this monograph summarizes the findings of this research project.

The significant conclusion of this monograph is that one battlefield framework does not fit all environments. Therefore, future doctrine should teach the characteristics of optimal battlefield frameworks in order to best assist commanders and staffs in visualizing, planning, and executing command and control.

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Introduction

The Military Operational Environment

The US Army's operating environment has changed dramatically in the past ten years. The end of the Cold War began in 1989 with the collapse of the Berlin Wall and finished with the dissolution of the Soviet Union in 1991. The most significant consequence of the dissolution of the Soviet Union is that the United States became the world's sole remaining superpower. As the sole remaining superpower, the United States continues to remain engaged in global geopolitics incurring numerous world responsibilities. Since 1990, these responsibilities have resulted in numerous US Army deployments in support of military operations in Iraq, Somalia, Haiti, Macedonia, Croatia, Eastern Slavonia, Hungary, Bosnia, Rwanda and Kosovo.¹

Changes in the US Army's operating environment since 1990 have precipitated changes in the United States National Security Strategy (NSS) as well. The National Security Strategy for a New Century, approved by President William J. Clinton in October 1998, defines five threats to US interests. The five threats are regional threats, transnational threats, a threat from the spread of dangerous technologies, foreign intelligence collection and failed states. Regional threats are states that have the capabilities to threaten our vital interests, through coercion or cross border aggression. Regional threats, such as Iraq and North Korea, actively improve their offensive capabilities, including their efforts to obtain nuclear, biological or chemical weapons and the long-range delivery systems to support these weapons. Additionally, regional hegemonies

such as Iran threaten not only their neighbors but also the oil that flows from the region.²

Transnational threats encompass those groups, movements or organizations not officially linked to any nation-state, but whose existence and actions clearly pose a threat to other nation-states. Unlike regional threats, transnational threats gain their support covertly from states and nations. Transnational threats, supported by rogue nations such as Afghanistan and Iran to name a few, threaten American interests and citizens both directly and indirectly. Transnational enemies typically sponsor and promote terrorism, harbor illegal drug trade, support illicit arms trafficking, and provides safe havens for international organized crime. Additionally, transnational threats cause uncontrolled refugee migrations, increase environmental damage, obstruct economic growth, hinder democratic development all of which lead to conflict creation. Lastly, transnational threats further complicate situations because they blur the distinction between terrorist groups, factions in ethnic conflicts, and insurgent movements. Responses to transnational threats, according to the NSS, typically require early involvement by US forces because the problem becomes significantly more dangerous and complicated over time.³

Acquisition of dangerous technologies by rogue nations, particularly weapons of mass destruction (WMD), poses the greatest threat to global security. Such WMD include chemical weapons, biological weapons, nuclear weapons, as well as the means to deliver these munitions. Advanced weapon technologies provide the means to inflict tremendous harm to US citizens and

troops both abroad and at home. In 1999, North Korea, as an example, launched a missile capable of reaching Japan and US forces located in the Pacific. The acquisition of dangerous technologies by rogue nations threatens vital US national interests by destabilizing the regions in which these rogue nations operate and attempt to influence or coerce their neighbors. The US currently employs diplomatic and economic methods in an attempt to restrict or prevent the technical information, technologies and materials from falling into the hands of rogue nations and enemies. US military operations in regions threatened by rogue nations possessing WMD are exposed to great risk and constrained to actions, which avoid conflict escalation to levels, which might trigger their use. Some examples of these situations are the recent US and North Korean negotiations and the continued military operations around the no-fly area of Iraq.⁴

Foreign intelligence collection efforts against the US are diverse, complex and difficult to counter. Espionage activities did not go away with the end of the Cold War. In some ways the US became more vulnerable to foreign espionage due to the increased access of foreign visitors to US industry and governmental agencies. Both adversaries and nations friendly to the US target her military, diplomatic, technological and commercial secrets for collection.

Lastly, the number of failed states in the world is expected to increase compounding threats to US citizens' abroad. Failed states are those whose internal governing apparatus can no longer effectively meet the myriad of social, economic, or political problems extant and, as a result, see the break down in

law and order and creation of mass poverty and suffering. Typically, failed states produce refugees, civil wars, humanitarian crises and political extremism.⁵

Despite the best international efforts, significant problems arise when governments fail. "State collapse occurs when structure, authority, legitimate power, law, and political order fall apart, leaving behind a civil society that lacks the ability to rebound to fill the vacuum," according to Terrence Lyons and Ahmed I. Samatar, of the Brookings Institution.⁶

In order to accomplish the mandates of the NSS, General Eric Shinseki, the 34th Chief of Staff of the Army, believes the Army must possess capabilities, which afford it strategic dominance across the entire spectrum of operations.⁷ This spectrum of operations is also referred to as the spectrum of conflict. The spectrum of conflict is divided into two categories. Category I is the "spectrum of combat" which includes combating terrorism, raids, strikes, support for insurgencies & counter Insurgencies, counter insurgency, limited convention conflict, regional conventional conflict, international war, tactical nuclear war, and strategic nuclear war. The second category is the "spectrum of peace" and it is characterized by domestic civil support, peace making, humanitarian assistance, peace building, security, peace keeping, show of force, NEO, support to counter drug, sanctions enforcement and peace enforcement.⁸

While the US Army has made tremendous strides in adapting itself to the changes in its operating environment, evidence suggests that this transition has not been easy. In particular, US Army officers have difficulty developing plans and controlling their execution within this new military operating environment;

one significantly different than the previous predictable Cold War environment. One reason US Army officers continue to struggle with this new operating environment is that they continue to use a prescribed battlefield framework more appropriate to conventional warfare scenarios than to the more recent stability and support operations observed today. Based on changes in the military operating environment, the prescribed battlefield framework of "deep, close and rear" (DCR) may not provide what is required to visualize the battlespace, develop plans and control their execution.

The issue to be explored is whether or not the battlefield framework prescribed in 1993 FM 100-5 is relevant on the different battlefield environments to which the US Army increasingly finds itself deployed. For example, FM 100-5 states that there are three states of environment: war, conflict, and peacetime. Given these three states, US forces conduct military operations that are: war, whose goal is to fight and win (e.g. Desert Storm); other than war, whose goal is to deter war and resolve conflict (e.g. Bosnia); and other than war, whose goal is to promote peace (e.g. Haiti). These distinct states may require different and distinct battlefield frameworks.⁹

This monograph analyzes FM 100-5's currently prescribed battlefield framework as well as alternative battlefield frameworks to determine whether or not any one framework is adequate for use across the entire spectrum of conflict. The 1993 FM 100-5 established a battlefield framework of deep, close, and rear (DCR). This battlefield framework served our nation well during the end of the Cold War, and DESERT STORM. A recent 1998 Draft FM 100-5 discarded the

DCR battlefield framework in favor of a new framework that uses decisive, shaping, and sustaining (DSS) as its defining parameters.¹⁰

This monograph begins by defining the military operational environment in Chapter I and showing why battlefield frameworks are needed. Chapter II defines battlefield framework doctrine, the evolution of battlefield framework doctrine and why battlefield framework doctrine remains relevant today. This chapter relies heavily on the 1982, 1986 and 1993 versions of FM 100-5 to define and explain current battlefield framework doctrine. This chapter raises the question, "Do different military environments require different battlefield frameworks?"

After introducing the military operational environment, and explaining the evolution and relevance of battlefield framework, this monograph examines whether current battlefield framework doctrine meets planning and execution requirements across the spectrum of conflict. The battlefield framework is analyzed against different environments and missions to determine its adequacy. Finally, this chapter explores the alternate battlefield frameworks that are available to planners.

Chapter III explores the environment in which US Army commanders and staffs operate across the spectrum of conflict. Chapter III serves as a prelude to an analysis of alternative battlefield frameworks developed and discussed in Chapter IV. The next part of the monograph, Chapter V, assesses the merits of each alternative battlefield framework to determine which if any, of these, battlefield frameworks best fits all environments. This Chapter concludes by

examining the question, "What are the characteristics of an optimal battlefield framework"? This question can only be answered after completing a comparison of different battlefield frameworks and environments. The final chapter of this monograph will summarize the significant conclusions of the research.

The intended audience for this monograph includes all doctrine writers and US Army officers who will be deployed in support of Army operations abroad; particularly those operations focused on peacekeeping and peace enforcement.

Chapter II

The Need for More than One Battlefield Framework

As an institution, the Army was beginning to appreciate that its missions were changing. We were being asked to do things that were largely unfamiliar to the generation of soldiers accustomed to facing the Soviet Union and the Warsaw Pact.

Gordon Sullivan and Michael Harper in Hope is Not a Method-1997 ¹¹

Changes in the military operational environment precipitated changes to the US Army capstone doctrinal manual, 1986 FM 100-5, OPERATIONS. In response to military requirements to commit to Operations Other than War (OOTW), the 1993 version of FM 100-5 established the battlefield framework. Similarly, 1997 FM 101-5-1, Operational Terms and Graphics, defines a battlefield framework as the overall structure of the battlefield at the tactical level. Moreover, FM 101-5-1 defines battlefield organization as the arranging and synchronizing of battlefield activities throughout the area of operations to accomplish the simultaneous operation of deep, close, and rear.¹²

A battlefield framework establishes an area of geographical and operational responsibility for the commander and defines the relationship between the area of operations (AO), the battle space, and the battlefield organization. The battlespace, as defined by the 2000 FM 100-5 Draft, are the environment, factors, and conditions that commanders must understand to apply combat power successfully, protect the force, or to complete the mission. The battlespace will include as necessary the air, land, sea, space, enemy and friendly forces, facilities, weather, and terrain outside the operational area. The

battlespace is conceptual, and, unlike the AO, is not assigned by the higher headquarters. Individual commanders determine their specific battlespace based on their mission, concept of operations, and force protection considerations.¹³

Battlefield framework doctrine is a tool that assists commanders visualizing the battle space and the activities that will occur in that battle space. This doctrine aids commanders in arranging and synchronizing assets within an assigned AO to allow for simultaneous operations and massing of effects against the enemy. Geometrically, the battlefield framework found in the 1993 FM 100-5 categorizes all tactical military operations as either as deep, close or rear operations (DCR).

The battle framework provides tools for commanders to utilize during both planning and execution of operations. Both FM 100-15 Corps Operations and FM 71-100 Division Operations contend that battlefield visualization is one of the key aspects of battle command. Battlefield frameworks are extensions of the process of battlefield visualization. Commanders and staffs must first gain an understanding of the current strengths, weaknesses, disposition and composition of both the enemy and friendly units. The second key requirement for commanders to obtain battlefield visualization is to discern and articulate a desired endstate. Next, commanders and staffs determine a sequence of actions that will position their force to achieve the desired endstate. Battlefield frameworks help commanders and staffs at all levels to codify all the above using a common doctrinal construct.¹⁴

During planning and execution of operations, the battlefield framework assists commanders in relating friendly forces to one another and to the enemy in terms of space, time and purpose.¹⁵ Commanders, currently use the DCR battlefield organization to think through and plan to fight the enemy throughout the depth of their area of operations. The DCR battlefield organization, to the enemy, appears invisible because the US Army commander is conducting simultaneous operations throughout the depth of the entire battlefield.

Battlefields, however, come in different shapes and sizes, they may be linear, non-linear, or asymmetrical. Linear battlefields, for example, dominated the Cold War between the Warsaw Pact forces and NATO forces of Europe. Peacekeeping operations in Bosnia and Kosovo offer examples of the non-linear battlefield environment. Lastly, an example of an asymmetrical battlefield is Somalia and the Three-Block War scenario espoused by General Krulak. The three block war environment forces US military forces to fight conventionally in a Urban Area, while simultaneously conducting humanitarian assistance and peace keeping operations within the same area of operations. According to General Krulak, these three operations (MOUT, humanitarian assistance, and peacekeeping operations) potentially can be conducted within a three-block area. The threat force attempts to undermine the US technological superiority by fighting in an urban environment; one that degrades the effectiveness of US military maneuver warfare and weapons. But, is the DCR battlefield organization relevant to all three? ¹⁶

The asymmetric environment warrants additional explanation.

Asymmetric threats seek to offset the advantages of bigger, stronger, more technologically capable opponents through setting conditions for battle which degrade their effectiveness or through employing weapons or tactics for which their opponent have no response. Asymmetric threats are not new. Weaker opponents have always been seeking ways to offset the advantages of stronger foes for centuries. Asymmetric threats, then, use indirect approaches in order to seek surprise and shock through physical and mental activities targeted against individuals and psyches of units.¹⁷

A fundamental explanation of DCR is required in order to determine how relevant the DCR battlefield organization is to different battlefield environments. The concept of fighting the enemy deep, close and rear can be first found in the 1982 version of FM 100-5 as a subset of Airland Battle doctrine. Airland Battle doctrine posited that the US Army faced a peer competitor in the areas of weapons, technology, and equipment. Within the European Theater, Warsaw Pact forces were larger than conventional NATO forces. The writers of this doctrine concluded that, in order to win, the US Army must fight the enemy throughout the entire depth of the battlefield- deep, close, and rear. Additionally, the authors of Airland Battle doctrine deduced that war would last longer than previously calculated. Airland battle doctrine was based, in part, on deep battle theory.¹⁸

Deep operations, unlike close and rear operations, are a relatively new concept for the US Army. Deep operations are based on deep battle theory.

The fathers of early deep battle theory are Mikhail Tukhachevskiy and Vladimir Triandafillov. Earlier techniques of employing armies in battle sought to fix enemy forces along an entire front focusing on the destruction of enemy forces through attrition rarely resulting in decisive victory. These techniques failed to produce decisive victory because in using such a tactical focus one could not prevent an enemy force from repositioning to prevent a penetration. Tukhachevskiy believed that with the advent of new types of forces (airborne troops, motorized and mechanized) that he could fix an enemy's reserves thereby bringing on the enemy's defeat.¹⁹

Tukhachevskiy envisioned the utilization of airborne assault landings in the enemy rear to disrupt his Command and Control (C2) and fix his reserve forces. Once the enemy's C2 was disrupted, and the reserves fixed, Tukhachevskiy believed that a penetration of the enemy's main defensive belt would bring about decisive victory. Triandafillov further refined and applied this theory to the actual organization of armies. Triandafillov determined he needed three groups of tanks to apply his concept; two groups of tanks to support the infantry, and the other to penetrate the depth of the enemy rear in cooperation with aviation and artillery. By 1936 the Soviets had established the doctrine and tactics to employ deep battle.²⁰

Britain's theorist such B.H. Liddell Hart and J.F.C. Fuller also wrote about the conduct of deep battle. To these theorists, the aim of deep battle was to disrupt C2, cut lines of communications and fix other forces.²¹ The US Army did

not begin to develop deep battle theory and application until the 1970s with the height of the Cold War with the Soviet Union.

General Donn A. Starry, serving as commander of the Training and Doctrine Command (TRADOC), deduced that the 1976 FM 100-5 US Army Doctrine of Active Defense was not sufficient to win a conventional war in Europe. According to Starry, "the Active Defense Doctrine", defeated only the first echelon Warsaw Pact forces. US Army and NATO conventional forces might not be able to destroy second echelon Warsaw Pact forces.²² General Starry viewed US Army deep battle theory as a means to disrupt, delay, and divert Soviet second echelon forces. These effects in deep battle, in turn, shaped the battle for the close fight. Unlike Soviet and British theorists, General Starry's concept of deep battle evolved from the defense and not the offense. General Starry's primary application tools were air, artillery, Special Forces, and electronic warfare.²³

In order to fix perceived deficiencies in the Active Defense doctrine, the 1982 FM 100-5 put forth Airland Battle doctrine and for the first time defined deep battle. The introduction of "deep battle" focused commanders at the operational levels on the need to disrupt, delay, divert, and destroy enemy second echelon forces as far away as possible. Employing assets against the enemy in deep battle prevents the enemy from massing combat power later. More importantly, the 1982 FM 100-5 manual introduced the "area of interest" and the "area of influence"; terms which categorized geographically areas within the commander's battlefield.²⁴

Divisions and Corps Battlefield Frameworks

The 1986 FM 100-5 refined the battlefield framework relationship between corps and divisions. The corps was designated the primary fighter of "deep operations" while the division was designated the primary fighter of the "close fight" with some overlap between these two levels. Both levels, corps and division, shared "rear" responsibilities. The purpose of the deep fight remained unchanged; primarily to disrupt and delay. The corps was assigned the primary responsibility for "setting conditions" for the close fight. The purpose of deep operations became clear; to shape the battlefield. This purpose is achieved through disruption of the enemy's tempo, denying the enemy's freedom of action, and destruction of key assets.²⁵

Close operations are characterized by the fighting between the committed forces and the tactical reserves of both combatants. Typically, battles and engagements of brigades, battalions, and lower units dominate close operations. Historically, wars are won by the decisive actions in the close fight.²⁶

The physical environment continues to dominate the critical elements of close combat. Historically, military forces are optimized to win in specific physical environments to insure they can dominate the close fight there. For example, the US developed a military force structure and a tactical doctrine during the Cold War to fight and win a conventional war in Europe. This physical environment led to the development of a US Army that can defeat any enemy in a conventional war.²⁷

But complex terrain and urban environments alter the nature of close combat. Engagements and battles in the urban environment will be more frequent. Opportunities for surprise and loss of contact with the enemy have greater significance in more open environments. Urban environments, unlike open environments, are more manpower intensive, and control of operations in complex terrain is much more difficult and less likely to produce decisive results quickly due to the isolating and cross compartmenting qualities of this environment.²⁸

Rear operations sustain the force during the current close fight, prepare for current and future deep fights, and position the unit for future operations. Rear operations include operations and security that ensure uninterrupted support to the commander. Additionally, rear operations include protection of key facilities, units and installations. Lastly, the 1986 FM 100-5 also described a rear area fight where the commander's freedom of action was preserved.²⁹

Deep operations in FM 100-15 and 71-100 are very similar but the manuals differ in their specifics of conducting deep operations. For example, Corps owns the assets that conduct deep operations such as: Field Artillery units, which include rockets, missiles and cannon artillery; aviation assets that are capable of conducting intelligence and destruction operations; PSYOP units; and US Air Force assets. Moreover, a US Army corps is organized with the required personnel to support a deep operations coordination cell (DOCC). The division level, by contrast, is limited in that it can only conduct DOCC operations with personnel who are dual suited for other primary positions. Doctrinally, the

corps is supported through the targeting methodology of Decide, Detect, Deliver, and Assess (D3A).³⁰

Corps operations overlap with division operations in the close battle. For instance, Corps directed and control artillery assets are maneuvered into the close fight area often times to attack deep targets. Additionally, Corps combat support and combat service support may also locate in the close fight area to best support Corps operations.³¹

Battlefield Frameworks and Joint Operations

Battlefield frameworks are used to a limited degree in some Joint Operations. According to Major Roy C. Sevalia an artillery officer and LTC David C. Sims an armor officer, the battlespace framework helps commanders relate their forces to one another and to the enemy in time, space, resources, and purpose. These proper relationships allow for simultaneous operations, maximum use of resources, and rapid massing of effects against the enemy. Sevalia and Sims published "Fighting Deep with Joint Fires" in Air Chronicles December 1999. This article describes how Joint Operations are extended throughout the theater and vertically into space. The issue is how planners synchronize and integrate the lethal and non lethal fires within the parameters of intelligence activities, air operations, ground operations, maritime operations, and logistics in time and space to achieve the Commander-in-Chief's (CINC) goals and objectives.³²

The joint level commander, Commander Joint Forces Land Component Command (C/JFLCC), optimizes the battlefield framework in a manner similar to

that of corps commander. For example, the C/JFLCC organizes the battlefield geographically to provide sufficient time and space for the major subordinate commands (MSCs) to conduct their fights. By allocating area of operations to MSCs, the C/JFLCC allows his MSCs the freedom of action necessary to effectively apply resources in his area of operations. For example, once the battlespace organization is set, MSC's can nominate targets through the Joint Integrated Priority Target List (JPITL). Battlefield framework doctrine is consistent from the joint level down to the tactical level. The question remains, "Do different military environments require different battlefield frameworks?"³³

General Frederick M. Franks argues in an article titled "Full Dimensional Operations: A Doctrine for an Era of Change" that a new era has been born. Commanders, in this new era will have to devise their own battlefield framework; one that best enables them to visualize the optimal arrangement of their forces in relation to other friendly forces and to the enemy. General Franks maintains that battlefield frameworks in the future cannot continue to be prescribed. Nor is the strategic endstate as predictable in the future, as it was in the recent past.³⁴

The major reason why future battlefield frameworks are not fixed is due in part to the significant changes in the military operational environment. As stated previously, the military operational environment is most likely to be non-linear and less predictable. The preponderance of US Army deployments, since 1989 have been to non-linear, non-contiguous battlefields such as Haiti, Somalia, Bosnia, Rwanda, and Kosovo rather than linear, contiguous battlefields such as DESERT SHIELD/STORM.

The non-linear, non-contiguous battlefield environment normally involves the insertion of US Army soldiers into complex, unstable, even chaotic situations that are highly dynamic. Moreover, because of this environment, US political leaders desire to hold the line or affect change in a conflict without resorting to war. US Army troops in this nontraditional environment will confront a "broad spectrum of challenges" in a variety of locations. This nontraditional environment is characterized by the nonlinear disposition of troops; no clearly defined enemy; the presence of non-combatants; and the presence of representatives of humanitarian assistance agencies. The traditional battlefield framework, DCR, provides little utility in the nontraditional environment.³⁵

Major Sean MacFarland in *Armor Magazine* expressed the same sentiments of both General Franks and views of the nontraditional environment. Specifically, Major MacFarland writes that during the 3d Squadron, 4th (US) Cavalry's deployment to Bosnia in 1996, their leadership gave up on attempting to put square pegs in round holes by applying Airland Battle Framework Doctrine (DCR) to a peace operation framework. The Squadron's leadership determined that a DCR battlefield organization would constrain their thinking, essentially blinding them to both dangers and opportunities. The Squadron's leadership chose to develop and employ another battlefield organization. The Squadron's battlefield organization was based on a framework in which operations were classified into three types: operations which supported the peace accord directly; operations which sustained the force; and the main effort operations as identified by the commander. Although this battlefield organization was employed in this

instance, Major MacFarland concludes that the framework established in Bosnia in 1996 is not the answer for all peace operations.³⁶ This US Army unit concluded that one battlefield framework does not fit all.

It becomes readily apparent that different military environments do require different battlefield frameworks. 3d Squadron 4th US Cavalry as recently as 1996 could not accomplish their mission adequately without coming to the realization that DCR did not optimize their situation. Moreover, each nontraditional environment is different, potentially requiring a different battlefield framework for each environment.

Chapter III

Offense, Defense, Stability and Support (ODSS)

Army commanders fight deep, close, and rear actions simultaneously in a manner that appears to the enemy as one continuous operation against him. They seek to attack the enemy simultaneously throughout the depth of the battlefield and mass both effects and forces when and where necessary to accomplish the mission.

FM 100-5 1993 ³⁷

The 2000 FM 100-5 (Draft) developed a construct that categorizes US Army operations as offense, defense, stability and support (ODSS) actions within both war and Military Operations Other Than War (MOOTW).³⁸ Assuming that these constructs are correct, this monograph compares the current DCR battlefield framework to the DSS battlefield framework and determines the adequacy of each doctrine in aiding the commander's visualization of the battlefield, planning, and execution C2.

The offense is the decisive form of war, regardless of any strategic, operational, or tactical consideration. There are four types of offensive operations: attack, movement to contact, exploitation and pursuit. The most significant purpose of the offense is to destroy or defeat the enemy.

OPERATION DESERT STORM is a good example of the offense as the decisive form of war to destroy an enemy. Situations may require a force to defend but the defending force defends until it can shift to the offense.³⁹ According to Carl von Clausewitz, methods of defense leads to the attack".⁴⁰ The decisive form of war, the offense, is well suited for a linear battlefield framework such as DCR.

The defense, by contrast is the stronger form of war.⁴¹ The primary purpose is to defeat the enemy's attack, buy time, economize forces, or to develop conditions favorable for offensive action.⁴² The 1993 FM 100-5 lists two types of defensive patterns; mobile and area. Unlike the offensive chapter in the 1993 FM 100-5, the defensive chapter explains operations in depth categorized by deep, close, and rear operations.⁴³ NATO's support of Europe during the Cold War serves as an excellent example for defensive actions.

Stability operations employ Army forces outside the US and US territories to promote and protect US national interests by influencing political, civil, and military environments and by disrupting specific illegal activities. The purpose of these operations is to promote regional and global stability as directed in the NSS and the National Military Strategy (NMS). Examples of Stability Operations are OPERATION UPHOLD DEMOCRACY, and OPERATION RESTORE HOPE. The US Army aim in these operations is to increase or underwrite regional security so that economic growth and development can occur.

Support operations, are those in which the Army assists domestic or foreign civil authorities to enhance their civil capabilities such as the riot control or hurricane assistance in Florida. Although the Army is not organized, trained or equipped to conduct support operations, many army elements such as military police and engineers can quickly adapt to the crisis or situation at hand. Similarly, the Army Reserve components may also have the special skills required to assist during the domestic or foreign emergency.⁴⁴

The Army's new *Division XXI* provides the Army commander and the Joint Force Commander (JFC) a flexible, combined arms force optimized for offensive operations. This division conducts "distributed operations facilitated by information superiority to destroy enemy forces and seize and retain terrain."⁴⁵ Distributed operations, by contrast to DCR, consist of activities and functions executed throughout the height, width and depth of an area of operations designed to accomplish the assigned mission. Operations may be executed simultaneously or sequentially against multiple decisive points or a single decisive point based on the elements of METT-TC (mission, enemy, terrain, troops, time available and civilians⁴⁶). Moreover, Division XXI is capable of conducting a full range of stability and support actions in a joint and multinational environment. Actions are grouped according to purpose rather than geographical location within an area of operations. Distributed operations, for this new division, are conducted as part of a Corps or Joint Task Force (JTF). The Corps or JTF, acting as the higher headquarters, tailors the Division XXI to meet specific mission requirements and directs the division to execute offensive, defensive, stability and support operations to achieve tactical or operational results significant to the JFC's campaign goals.⁴⁷

Offense and Defense Actions

The Army's current DCR battlefield framework is sufficient for offense and defense (OD) operations but questionable in stability and support (SS) operations. Brigadier General Maggart and Colonel Fontenot convincingly argue

that the DCR battlefield framework was sufficient in OPERATION DESERT STORM. They argue this point in "Breaching Operations: Implications for Battle Command and Battle Space" in 1998. The 1993 FM 100-5 describes an enemy-focused, seamless view of battle and the battlefield. For instance, movement and maneuver take on new characteristics, since they are tied to the enemy and not to friendly control measures or other friendly units.⁴⁸

BG Maggart and COL Fontenot contend that battle command is an essential companion to the concept of battle space. Battle command, as previously mentioned, is commander-centered rather than staff-centered; command-centered rather than control centered. Moreover, battle command is defined as visualizing the current and future state of friendly and enemy forces and then formulating concepts of operation to accomplish the mission. This definition confirms the Clausewitzian emphasis and the School of Advanced Military Studies (SAMS) motto that the mind (commander's) is the key to victory. Technology is a tool for commanders and staffs to use that will eventually free the commander of the tyranny of the command post. In their article, BG Maggart and COL Fontenot use the 1st Infantry Division's (ID's) deliberate attack on 24 February 1991, which is normally referred to as "the breach" or the "attack of the Big Red One."⁴⁹

The breach, nested within the concepts of commanders' intent and purpose, was not an end in itself. The breach was a beginning or a means to achieve the end. The end or purpose of this operation was to unleash the powerful 1st Armored Division (UK) to attack enemy front-line units from the flank

and destroy local tactical reserves. The design of this operation was to force the Iraqi leadership to commit the famed Republican Guard's Forces to battle, which was the key to achieving the primary mission of turning the Iraqis out of Kuwait. Simply put, the 1st ID's attack was part of a seamless vision, nested within a DCR framework, conceived at the CINC's level to dominate the battle space in Southwest Asia down to the platoon level. ⁵⁰

Stability and Support Actions

Unlike the sufficiency of the DCR battlefield framework in OD operations, evidence is mounting that the DCR battlefield framework is not sufficient in SS operations. Dr. Larry Yates, a history professor at the Command and General Staff College at Ft. Leavenworth, Kansas contends that "many US military officers have difficulty in coming to grips with Operations Other than War (OOTW)."⁵¹ For the purposes of this monograph, Military Operations Other Than War (MOOTW) and Operations Other Than War (OOTW) are synonymous.

OOTW or SS operations actions are considered unorthodox or nontraditional when compared to traditional operations such as fighting conventional wars. The US military, historically, has engaged far more often in these nontraditional missions rather than the conventional warfare. The most significant changes in the non-traditional environment compared to the traditional environment are the enemy, non-combatants, the political-military dimension, changing missions (mission creep), rules of engagement (ROE), and the role of

combat troops. The nontraditional environment of the OOTW battlefield is more likely than not to involve a nonlinear disposition of troops, the absence of a clearly defined enemy, and the presence of noncombatants. Doctrinally, US military forces are to be neutral and impartial in stability operations; avoiding the preferential treatment of one opposing faction over another. Additionally, political-military relationships often force the US military to work closely with a variety of political authorities. Finally, the ROE, the role of combat troops and the high probability of changing missions create an environment of uncertainty for the US military.⁵²

Chapter IV

Alternative Battlefield Frameworks

Thus far this monograph has discussed the deep, close, and rear battlefield framework in detail. Currently, US Army doctrine writers are considering a second possible battlefield framework based on DSS. The 1998 FM 100-5 (Draft) proposed that the DSS battlefield organization become the framework for visualizing, planning, and execution C2 in support of Division XXI and distributed operations. This update to the battlefield organization and framework arranges military activities by purpose rather than a location in battlespace.⁵³ The motivation behind the proposed change to the battlefield organization framework was provided by observations that planners for operations such as OPERATION PROVIDE HOPE in Somalia and OPERATION JOINT ENDEAVOR in Bosnia found themselves challenged in their efforts to visualize and plan these operations; in part because the DCR battlefield organization was not very useful.

The terms changed from battlefield framework to operational framework. The difference between the two frameworks is that the operational framework relates friendly forces to one another and to the enemy in terms of time, space, purpose, and resources. The operational framework connotes a broader framework with elements of area of operation (AO), area of interest (AI), battlespace, and the activities of decisive, shaping and sustaining operations. The previous definitions of AO, AI, and battlespace remain accurate under the

proposed operational framework. The major difference between DCR and DSS is that in DSS the operational organization relates actions within a commander's AO to their purpose using DSS rather than using their spatial relationship on the battlefield.

The Decisive Operation

The decisive operation is that operation or military activity designated by the commander, which applies simultaneous, overwhelming military capabilities to directly achieve the purpose of the mission.⁵⁴ The decisive operation is similar in concept to that of the main effort. Normally, the commander selects only one decisive operation, which ensures unity of effort and clarifies priority of resources. All other military activities are categorized as shaping or sustaining operations. These latter two operations are "supporting efforts" as discussed in our current doctrine. The decisive operation is normally focused on the decisive point of the operation being conducted.⁵⁵

Commanders select the decisive point early in the planning process so that staffs can focus combat power on that event or geographical location. Moreover, commanders may select successive decisive operations as the continuance of mission dictates. Commanders must re-designate the shaping and sustaining operations in continuing operations to maintain support of changing decisive operations.⁵⁶

The decisive operation, may, achieve the purpose of the operation without total reliance on maneuver forces in close combat. The decisive operation may

occur throughout the depth of the battlespace. For example, during offensive and defensive operations commanders may determine that the decisive operation is the seizure or retention of key terrain, or the destruction of enemy forces. By contrast, during stability and support operations commanders may designate the decisive operation as providing humanitarian assistance, disarming opposing factions, or evacuating noncombatants.

Shaping Operations

Shaping operations apply military capabilities to set the conditions for decisive operations.⁵⁷ Shaping operations, similar to the decisive operation, may occur throughout the battlespace and can be applied by any type of force. Historically with DCR, engineer efforts, and deep fires from both aviation and artillery categorized shaping operations. Shaping operations within offensive and defensive operations may include electronic warfare jamming, destruction of command and control systems and denying the enemy use of key terrain. Within stability and support operations, shaping operations may include psychological operations to prevent confrontation between opposing forces, humanitarian assistance, or repair of infrastructure. Finally, commanders, staffs, and planners apply economy of force to shaping operations so that the decisive operation receives overwhelming military capabilities.⁵⁸

Sustaining Operations

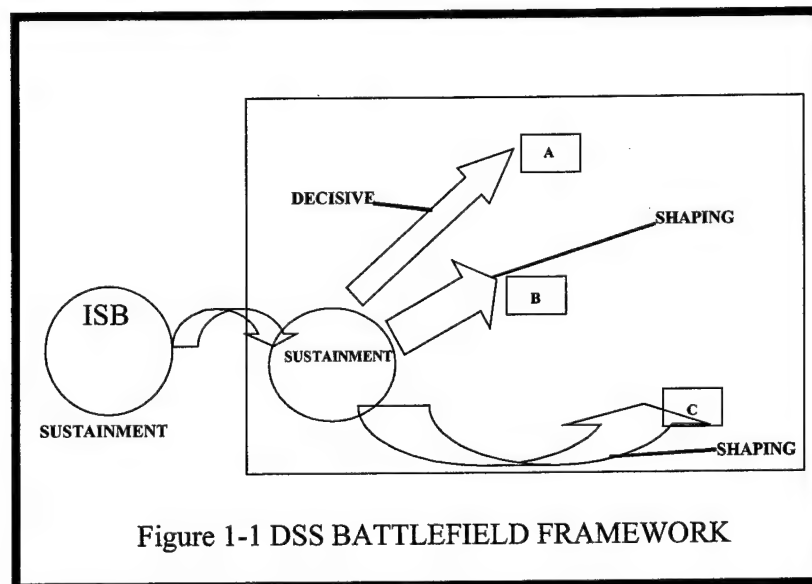
The third element of this operational framework is sustaining operations. Sustaining operations are synonymous with the rear operations of DCR.

Sustaining operations encompass all logistics and combat service support operations that support friendly forces, secure and maintain the sustainment base, and protect lines of communication. Sustaining operations are not decisive actions, but failure to maintain adequate sustaining operations can cause the overall mission to fail. Sustaining operations may support other entities than the commander's military force. For example, the commander may direct the sustaining operation to support non-government agencies such as Red Cross and Doctor's Without Borders during certain missions.

DSS, as an operational framework significantly assists commanders and staffs in visualizing, planning and executing C2 during current operations. DSS is designed to assist commanders in quickly determining a desired endstate, and subsequently the sequence of activity required moving his force from its current state to end state. DSS is a purpose based battlefield framework that allows commanders to focus different activities simultaneously within close proximity because these activities are purposed based and not spatial or geographical like DCR. This simultaneity of activities, DSS, creates conditions to command and control activities that bring about a desired endstate. DSS, in addition to achieving endstates, allows staffs to monitor and control numerous activities simultaneously. DCR, by contrast, was better suited to allow commanders and staffs to command and control activities sequentially rather than simultaneously.

Figure 1 below depicts the simultaneity of DSS actions within a given AO. Simultaneous operations within the AO are focused on their individual intents of decisive, shaping or sustaining. Moreover, these operations maybe sequential

rather than simultaneous. The flexibility of the DSS framework to operate sequential or simultaneously is a significant advantage of this battlefield framework because it affords commanders more options to plan, visualize, and execute C2.



Digital Battlefield Frameworks

A recent technological advance has introduced a new battlefield framework. According to MAJ Arthur S. Degroat and David C. Nilsen, information is synonymous with combat power. These two authors are members of the Advanced Warfighting Working Group headquarters at Ft. Knox, Kentucky. This conclusion is further supported by the former Chief of Staff of the Army General Gordon Sullivan's statement that "Information is the currency of victory on the battlefield." The concept of a digital battlefield framework is that

currently information and combat power are interchangeable on the battlefield. Under the digital battlefield framework, AI and battlespace remain unchanged. The battlefield organization, however, becomes information yields space. The US Air Force utilization of Air-Boxes which can be turned on and off in a certain theater, as needed by the command is an example of this battlefield organization. A battlefield organization depends on, and is shaped by superior information.⁵⁹

Because of technological advances, information can now effectively place combat power. However, simply gathering more battlefield information does not increase combat power. Effective utilization of timely information allows commanders to better visualize the battlefield. This real-time information enhances not only a commander's visualization of the battlefield for planning, but aids commanders and staffs tremendously during execution. During both planning and C2, commanders and staffs utilize an economy of force which enhances efficiency and precision gained by digital situational awareness. Combat power is increased because forces are employed only where and when they can influence operations. Absolute situational awareness eliminates the need to secure everything with forces because we know what the enemy is doing. As a result of this ability to place forces only where they are needed, and to conduct only the required activities such as refueling, rearming, maintaining, planning, rehearsing, and resting combat power is also increased.⁶⁰

Figure 2 below illustrates both the increase in number of operations and the larger area that can be covered by a given force within the digital battlefield

framework. Additionally, Figure 2 demonstrates how this battlefield framework provides situational awareness to commanders and staffs in order for them to visualize, plan and execute C2 operations by employing combat power only at the most relevant places.

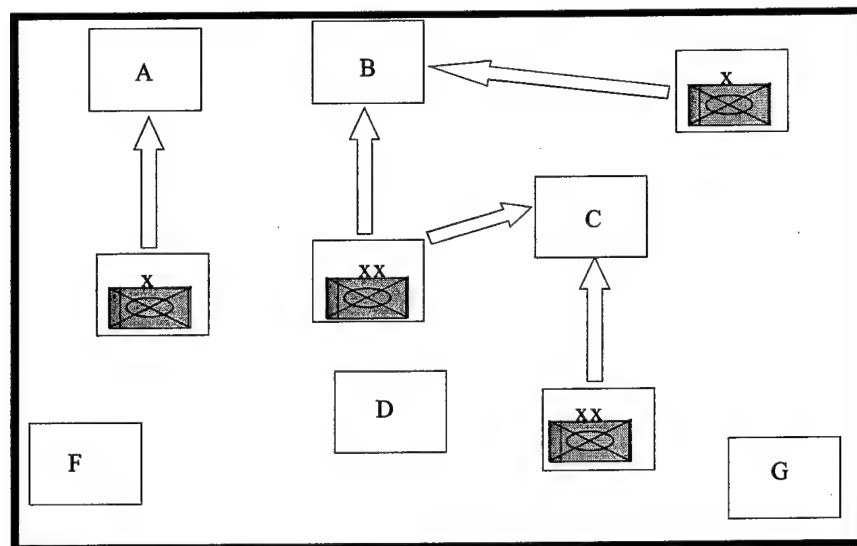


Figure2- Digital Battlefield Framework

The digital battlefield is a fluid battlefield; one that is shaped by the information gained by the commander. This information gives the commander options about how best to employ his force. Characteristics of this battlefield are:

- Information is gathered by dedicated information systems
- Secure areas are defined more by time than space
- Operations are predicated on synergy
- Decisive or critical points are the defining characteristics of the battlefield framework, not the contiguous FLOT

- The concepts of deep, close and rear are obsolete
- Combat power is applied in smaller, distributed formations, with increased lethality.
- Success on this battlefield requires increased intellectual effort among commanders, staffs, and soldiers
- Economy of force and precision are dominant attributes of digital warfare.⁶¹

Peace Operations Framework

The third and final battlefield framework discussed in this monograph is the Peace Operations Framework (POF). The Army's 3rd Squadron, 4th US Cavalry, required a framework to focus the staff and commander's thoughts during the implementation of the Dayton Peace Accord, January 1996 in Bosnia. Doctrinally, the unit attempted to use DCR but found difficulty in implementing DCR against a non-linear situation. The POF, according to the MAJOR Sean MacFarland, author of "A Framework for Peace Operations," is based on treaty operations, support operations and a designated main effort within one of these categories.⁶²

The commander and staff of the 3rd ACR analyzed the current battlefield framework and recognized that "close" could have been defined as the current operations, "deep" could have been defined as future operations, and that the "rear" could have been defined as the base camps. However, the 3rd ACR staff determined after mission analysis that the framework was based on treaty

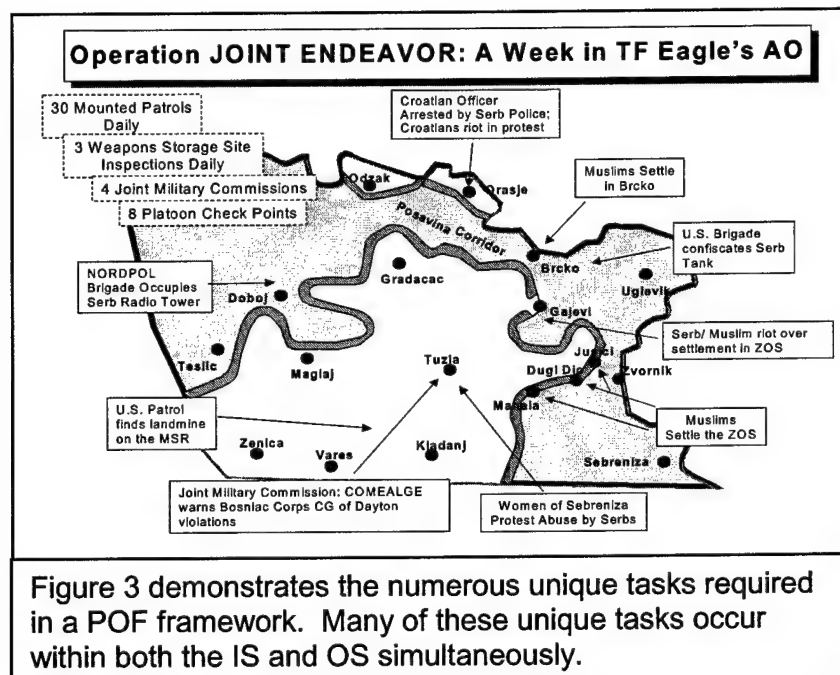
operations, support operations, and a designated main effort within one of those categories. The elements of the framework reside in the operations space, which is surrounded by the influence space.

The peace operations framework parameter is uniquely different than DSS and the digital battlefield frameworks. The battlespace and the AI are uniquely different. The battlefield organization, however, is also purpose similar to DSS, but different in that this purpose drives desired conditions such as democratic elections and open markets, which produce desired end states. The POF battlefield framework is characterized by influence space and operation space, which sets operational parameters.⁶³

The influence space (IS), outermost region, is similar to battlespace in that it links operations within an AO to relevant events and places far beyond its boundaries, in the air, in space, at sea and on the land. However, battles are not fought throughout the battlespace, especially in peace operations. Therefore, IS blends the area of influence with the battlespace and focuses on influence without a higher headquarters, which is more suitable for a stability action.⁶⁴

The operations space (OS), unlike the IS, has a defined boundary. The OS combines the AO with three-dimensional aspects. For this unit, the OS extended beyond the ground sector to include a coalition brigade's sector. Within this OS, the squadron conducted its treaty and support operations. Next, the 3rd ACR chose tasks to complete such as Reconnaissance and Surveillance, Force Presence Operations, Freedom of Movement Operations, Information Operations, and mine clearing operations. Supporting operations such as force

protection, communications support, route clearance, and CSS operations were the enablers of treaty operations. Finally, the main effort selected was the stabilizing forces rather than a destructive decisive force normally selected in conventional operations. Figure 3 below depicts the numerous tasks conducted in a POF operation.⁶⁵



Chapter V

Analysis of Alternative Battlefield Frameworks

An analysis of the three alternative battlefield frameworks, DSS, Digital and POF concludes that the each battlefield framework has strengths and weaknesses; DSS being the best overall framework. The DSS framework is sufficient for use across the entire spectrum of offense, defense, stability and support (ODSS Operations). DSS does not require extensive training or equipment for commanders and staffs to understand or implement. Moreover, DSS is a compatible battlefield framework to use in both joint operations and with coalition forces.

The digital battlefield framework is a suitable framework in **some situations**. Interoperability of equipment begs the question about the suitability of this battlefield framework across the spectrum of ODSS. For example, not all units in the Army possess the systems found in the Division XXI. Therefore, an interoperability issue arises when attempting to communicate between units in joint and coalition operations and between active and reserve forces. The digital battlefield framework does, however, offer an alternate battlefield framework with the potential for use in different environments. The digital battlefield framework is suitable across the ODSS spectrums, but can only be used by units equipped to employ it.

The last alternative battlefield framework, the POF, is not a suitable battlefield framework across the entire spectrum of ODSS. The POF framework

is only suitably employed in the stability and support environments. The POF, as designed, is not sufficient to conduct military operations in the offense and defense environments. The POF lacked the utility in organizing the battlespace to effectively coordinate combat operations. The POF is, however, another example of a battlefield framework that fit certain environments.

Further analysis of the three alternative battlefield frameworks discussed in this monograph, DSS, Digital, and POF concludes that none of these three battlefield frameworks require a linear environment. Similarly, all three of these battlefield frameworks focus, to some degree, on purpose. All three frameworks meet criteria used to judge their applicability; namely, the spectrum of conflict, compatibility with joint operations, and utility at both operational and tactical levels of war.

The spectrum of likely operations requires a land force to operate in a joint, combined and multinational environment with missions that range from humanitarian assistance and disaster relief to peacekeeping and peacemaking to major theater wars which include the potential use of weapons of mass destruction.⁶⁶ Against this criterion, two of the battlefield frameworks are suitable: DSS, and Digital. The POF is not suitable because it is focused primarily for peace operations and not the entire spectrum of likely operations.

The "Three-Block War", article by Marine Corps General Krulak, best describes the current and future combat situation. The "Three-Block War" is a simultaneous situation where a commander is faced with three distinct spectrums of likely operations. For example, the commanders' force conducts

humanitarian assistance in one area, conventional MOUT war in another sector and peace operations in another sector.⁶⁷ The best framework for the "Three-Block War" environment is undoubtedly the DSS framework. Within the three-block war, construct many actions will overlap and the DSS framework provides focus within this environment. The Digital is second best, but is suspect because only certain units and none of our coalition partners will have the same technology as the US force. Therefore, different units will be forced to use different frameworks that may add to friction during a three-block war scenario.

The next criteria, compatibility with Joint Operations is difficult to define because Joint Publication (JP) 3.0 does not list a battlefield framework. However, an analysis of compatibility is conducted based on Sister service's capabilities and numerous conversations with School of Advanced Military Studies (SAMS) classmates. The Army, according to the 1993 FM 100-5, does not operate alone.⁶⁸ The Army as part of the Joint Team conducts operations as a total force. The inherit requirement then to conduct maneuver from both the sea and air, and to control lethal and non-lethal fires from the land, air, and sea is a significant challenge. An analysis of the three frameworks finds the DSS battlefield framework as the best because it is best understood by members of the joint community. The second best based on the joint community input was the Digital framework because most the systems in the joint community are digitized. There is concern, however, over the interoperability of the different services' equipment. The least preferable again, was the POF because it is viewed as narrowly focused on peace operations only.

The Optimal Battlefield Framework

Thinking about choices to lay out that framework is the business of both tactical- and operational-level Army commanders and staffs. Options available range from a linear framework with clearly defined geometry and lines with contiguous units and deep, close, and rear boundaries, to a less precisely structured framework where units might not be adjacent to one another and have no linear relationship.

FM 100-5 1993 ⁶⁹

The purpose of this monograph is not to rate one battlefield framework better than another. The thesis of this monograph is that army doctrine should not prescribe just one battlefield framework. Doctrine is descriptive and not prescriptive.⁷⁰ Doctrine should teach principles required for leaders to construct battlefield frameworks that will fit the myriad of missions commanders and staffs face across the spectrum of conflict; similar to what the leaders of 3d ACR did when they established the POF. For any battlefield framework to be useful, it must allow its user to synchronize military operations using the elements of time, space, combat power or forces and purpose.

Chapter VI

Conclusions

This monograph concludes that doctrine should no longer prescribe one battlefield environment to conduct operations. Changes in the military operating environment have rendered the traditional DCR battlefield framework less useful when applied across the spectrum of conflict. In addition to changes in the environment, changes in the types of missions conducted during US army deployments have also occurred. Conventional combat missions have given way to stability and support (SASO) missions and the number of these have increased. SASO missions involve the execution of complex operations, which do not fit well in a DCR battlefield framework. Other frameworks must be developed, explored, and adopted to better serve the Army.

While the DCR battlefield framework is more than sufficient in certain environments, the DSS battlefield framework is more adaptable to planning across the spectrum of conflict, and planning at the operational level of war. Necessity is often the mother of invention. This research uncovered yet a third battlefield framework that was employed with much success during the conduct of peace operations in Bosnia. Commanders and staffs must adapt or develop battlefield frameworks to meet their needs to facilitate effective planning and control in future wars. One battlefield framework does not fit all operations in the new military operating environment, nor should it.

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